

CLAIMS:

- 1 1. A method for automatically switching remote shared devices in a dense server
2 environment comprising the steps of:
3 receiving a request to access a shared device from a server blade; and
4 issuing a query as to whether said shared device is being accessed;
5 wherein if said shared device is not being accessed by said server blade then
6 the method further comprises the steps of:
7 receiving a response to said query indicating that said shared device is
8 not available; and
9 waiting to receive a response that said shared device is available.
- 1 2. The method as recited in claim 1 further comprising the step of:
2 determining if said shared device is being accessed.
- 1 3. The method as recited in claim 2, wherein if said shared device is not being
2 accessed then the method further comprises the steps of:
3 connecting said shared device with said server blade; and
4 transferring said request to access said shared device to said shared device.
- 1 4. The method as recited in claim 2, wherein if said shared device is being
2 accessed then the method further comprises the step of:
3 determining if said shared device is being accessed by said server blade.
- 1 5. The method as recited in claim 4, wherein if said shared device is being
2 accessed by said server blade then the method further comprises the steps of:
3 connecting said shared device with said server blade; and
4 transferring said request to access said shared device to said shared device.
- 1 6. The method as recited in claim 1 further comprising the steps of:
2 receiving said response that said shared device is available;

3 connecting said shared device with said server blade; and
4 transferring said request to access said shared device to said shared device.

1 7. The method as recited in claim 1, wherein said shared device is a Universal
2 Serial Bus device.

1 8. A computer program product embodied in a machine readable medium for
2 automatically switching remote shared devices in a dense server environment
3 comprising the programming steps of:

4 receiving a request to access a shared device from a server blade; and

5 issuing a query as to whether said shared device is being accessed;

6 wherein if said shared device is not being accessed by said server blade then
7 the computer program product further comprises the programming steps of:

8 receiving a response to said query indicating that said shared device is
9 not available; and

10 waiting to receive a response that said shared device is available.

1 9. The computer program product as recited in claim 8 further comprises the
2 programming step of:

3 determining if said shared device is being accessed.

1 10. The method as recited in claim 9, wherein if said shared device is not being
2 accessed then the computer program product further comprises the programming
3 steps of:

4 connecting said shared device with said server blade; and

5 transferring said request to access said shared device to said shared device.

1 11. The computer program product as recited in claim 9, wherein if said shared
2 device is being accessed then the computer program product further comprises the
3 programming step of:

4 determining if said shared device is being accessed by said server blade.

1 12. The computer program product as recited in claim 9, wherein if said shared
2 device is being accessed by said server blade then the computer program product
3 further comprises the programming steps of:

4 connecting said shared device with said server blade; and

5 transferring said request to access said shared device to said shared device.

1 13. The computer program product as recited in claim 8 further comprises the
2 programming steps of:

3 receiving said response that said shared device is available;

4 connecting said shared device with said server blade; and

5 transferring said request to access said shared device to said shared device.

1 14. The computer program product as recited in claim 8, wherein said shared
2 device is a Universal Serial Bus device.

1 15. A system, comprising:
2 one or more shared devices; and
3 a plurality of server blades coupled to said one or more shared devices via a
4 service unit, wherein said service unit is configured to establish a connection between
5 one of said one or more shared devices and one of said plurality of server blades
6 requesting to access said one of said one or more shared devices;
7 wherein said requesting server blade comprises:
8 a processor; and
9 a memory unit coupled to said processor, wherein said memory unit is
10 operable for storing a program, wherein the program is operable for performing the
11 following programming steps:
12 receiving a request to access said requested shared device from
13 said requesting server blade; and
14 issuing a query to said service unit as to whether said requested
15 shared device is being accessed;
16 wherein if said requested shared device is not being accessed
17 by said requesting server blade then the program is further operable for performing
18 the following programming steps:
19 receiving a response to said query indicating that said
20 requested shared device is not available; and
21 waiting to receive a response that said requested shared
22 device is available.

1 16. The system as recited in claim 15, wherein said service unit comprises:
2 a processor; and
3 a memory unit coupled to said processor, wherein said memory unit is
4 operable for storing a computer program, wherein the computer program is operable
5 for performing the following programming step:
6 determining if said requested shared device is being accessed.

1 17. The system as recited in claim 16, wherein if said requested shared device is
2 not being accessed then the computer program of said service unit is further operable
3 for performing the following programming step:

4 connecting said requested shared device with said requesting server blade;

5 wherein if said requested shared device is not being accessed then the program
6 of said requesting server blade is further operable for performing the following
7 programming step:

8 transferring said request to access said requested shared device to said
9 requested shared device.

1 18. The system as recited in claim 16, wherein if said requested shared device is
2 being accessed then the computer program of said service unit is further operable for
3 performing the following programming step:

4 determining if said requested shared device is being accessed by said
5 requesting server blade.

1 19. The system as recited in claim 18, wherein if said requested shared device is
2 being accessed by said requesting server blade then the computer program of said
3 service unit is further operable for performing the following programming step:

4 connecting said requested shared device with said requesting server blade;

5 wherein if said requested shared device is being accessed by said requesting
6 server blade then the program of said requesting server blade is further operable for
7 performing the following programming step:

8 transferring said request to access said requested shared device to said
9 requested shared device.

1 20. The system as recited in claim 15, wherein the program of said requesting
2 server blade is further operable for performing the following programming step:

3 receiving said response that said requested shared devices is available.

1 21. The system as recited in claim 20, wherein the computer program of said
2 service unit is further operable for performing the following programming step:

3 connecting said requested shared device with said requesting server blade;

4 wherein the program of said requesting server blade is further operable for
5 performing the following programming step:

6 transferring said request to access said requested shared device to said
7 requested shard device.

1 22. The system as recited in claim 15, wherein said requested shared device is a
2 Universal Serial Bus device.